TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL Produced by NASA/GODDARD SPACE FLIGHT CENTER CATS on 3/22/00 REQUEST FOR TASK PLAN / TASK ORDER Page CONTRACTOR CONTRACT NO./TASK NO. JOB ORDER NUMBER APPROP. FY AMENDMENT NAS5-99124 QSS Group, Inc. 410-287-17-11-89 99 TASK TITLE Task End Date: MAP Electrical Services for OBSERVATORY I&T 9/30/00 APPROVALS: ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) DATE ORG CODE | MAIL CODE PHONE 3/23/2000 Lisa Bartusek / 565 410.4 301-286-1311 BRANCH HEAD CODE PHONE Paul Bryant 565 301-286-7897 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) DATE CODE PHONE Robert S. Lebair, Jr. 560 301-286-6588 FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP. (IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK) ONO YES Larry Moore Mike Delmont The contractor shall identify and explain the reason for any deviations, exceptions, (To be completed by Contracting Officer) or conditional assumptions taken with respect to this Task Order or to any of the C.O. Requested Quote on: technical requirements of the Task Order Statement of Work and related specifications. Date: MAR 28 2000 The contractor shall complete and submit the required Reps and Certs. ○ YES Contractor will develop specification or statement of work under this task. NO ○ YES ○ N/A Flight hardware will be shipped to GSFC for testing prior to final delivery. NO Government Furnished Property/Facilities: YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) Onsite Performance: NO YES TOTAL O PARTIAL If yes: If partial, indicate onsite work in SOW by asterisk (*) Surveillance Plan Attached: YES NO Hightlighted Contract Clauses: (To be completed by Contracting Officer) Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shal be April 1, 2000. INCENTIVE FEE STRUCTURE (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) No. 3 No. 1 No. 2 No. 4 ○ No. 5 Cost 10% 50% 25% 25% 10% 45% 15% 25% 25% 50% Schedule Technical 75% 25% 50% 25% 45% (To be completed by Contracting Officer) The target cost of this task order is \$247,819 12,035 The target fee of this task order is The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of the contract is \$259,854 The maximum fee is \$17,589 The minimum fee is \$0. AUTHORIZED SIGNATURE TASK ASSIGNMENTS AN**EREACH SETH J. AUSTIN** THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE: CONTRACTING OFFICER E OF CONTRACTING OFFICER DATE TYPED NAME OF CONTRACTING OFFICER

AUTHORIZED SIGNATURE

DATE

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CONTRACTOR CONTRACTINO TASKINO

TASK NO

AMENDMENT

QSS Group, Inc.

NAS5-99124

231

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK:

(See page 3)

PERFORMANCE SPECIFICATIONS:

All activities involving Flight Hardware shall be in compliance with and adhere to the procedures specified in (1) MAP Quality Manual, MAP-MSN-MGMT-22 and appendicies thereto, and (2) MIL-STD-1773. All documentation shall be configured in accordance with the MAP Configuration Management Plan, MAP-MSN-MGMT-21. All activities shall be in accordance with Goddard safety and engineering standards, procedures and guidelines.

Technicians shall be ESD, Crimping and Soldering certified throughout performance period.

APPLICABLE DOCUMENTS:

(1) MIL-STD-1773

MAP Quality Manual, MAP-MSN-MGMT-22 and appendicies thereto

(3) MAP Configuration Plan, MAP-MSN-MGMT-21 (4) GSFC ISO 9000

MILESTONES/DELIVERABLES AND DATES:

Absolute

Due Date Milestone/Deliverable Description

6/15/00 TRS and Microwave System PRT Harness Dressing

Spacecraft Integration services 6/15/00 Microwave System integration 6/15/00

Flight Fuse Plug fabrication, verification and integration 6/21/00

Observatory environmental test prep services 8/1/00

Relative **Due Date**

Milestone/Deliverable Description

PERFORMANCE STANDARDS:

Schedule:

On-time delivery/completion of the deliverables/milestones

Technical:

ATR's acceptance of each of the deliverables

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Lisa Bartusek, building 29, Room 150

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Contract NAS5-99124

STATEMENT OF WORK:

Task #: 231

This is a follow-on to Task 187 and Task 61 under this contract. Anticipated start date is 4/1/00.

All MAP PRT shielding on the TRS and microwave system are to be completed by the contractor to meet specifications and schedule requirements. Additionally, after the cold-vibe-cold test the harness dressing for the microwave system will be completed.

Contractor shall provide for completion of the observatory environmental testing preparations started under Task 187. These preparations include GSE harness fabrication and verification; test thermal hardware bonding, wiring, harness routing and terminations;

Instrument and spacecraft harness integration, lead shielding after integration, and harness readiness for environmental testing are to be completed to meet the technical and schedule requirements.

The contractor shall provide services to fabricate, verify and integrate flight fuse plugs and trim resistor brackets to the spacecraft according to documentation provided by the MAP Electrical Systems Engineer.

The contractor shall provide services for the electrical system integration and testing for the Microwave Anisotropy Probe (MAP) spacecraft and instrument, both individually and as an Observatory. These services shall include the responsibility for extensive trouble shooting of the MAP Electrical Subsystem and associated components, the execution of test procedures and test scripts, as well as the identification, explanation and resolution of problems encountered during testing.

The following specific activities are required:

- Maintain a daily updated event log on all activities performed each day for the purpose of documentation of activity status and historical events.
- Attend daily standup meetings. Obtain priorities of technical support required for the electrical system.
- Provide extensive and comprehensive trouble shooting on identified issues within
 the electrical system and identify specific problem(s). Report results (written or
 verbal as required by the ATR) to ATR or other identified leads for the activity.
- As a member of the testing team implement test procedures/test scripts, and provide written test reports following the test to the task ATR.
- Participate in all testing for the MAP instrument and spacecraft, which involves the electrical system.

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REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

STATEMENT OF WORK:

Task #: 231

 Serve as the trained electrical technician(s) for using the various electrical equipment such as: Attenuators, O/E Converters, Power Meters, Optical Time Domain Reflectometers (OTDR), Oscilloscope, Multi-Meters, etc.